# THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA ENVIRONMENTAL HEALTH & SAFETY DEPARTMENT

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May 10, 2017	Signature on File	For Custodial Supervisor Use Only
TO:	Katherine Good, Principal Coconut Creek Elementary	Custodial Issues Addressed  Custodial Issues Not Addressed
FROM:	Daniel Meyer, Project Manger Environmental Health & Safety Department	
SUBJECT:	Indoor Air Quality (IAQ) Assessment	

On May 10, 2017, I conducted an assessment at **Coconut Creek Elementary School.** Attached are findings and recommendations for further assessment, remediation, or corrective actions needed.

The IAQ assessment did identify one or more existing conditions impacting IAQ and has generated appropriate work orders to correct deficiencies in systems and maintenance that could contribute to decreased indoor air quality. At the time of the assessment, these concerns were not an immediate health or safety concern to building occupants. However, due to individual sensitivities and predisposing health factors, it is possible that some building occupants may elicit a health response to agents and / or conditions identified during the evaluation. Therefore, to further improve IAQ, prevent development of future IAQ-related problems, and to reduce the potential for IAQ-related complaints by building occupants, the IAQ Assessment Team recommends appropriate follow up of each item identified and listed in the attached evaluation.

Please ensure that your Head Facilities Serviceperson receives a copy of this correspondence so that the recommendations requiring their attention can be addressed. In an attempt to separate IAQ issues from general maintenance items, the attached assessment may contain direction for site based staff to generate a work order through COMPASS. Within two weeks a representative from the Custodial/Grounds Department will conduct a follow-up visit to ensure that all site based custodial issues have been appropriately addressed.

Should any questions arise, or if the current concerns continue after the attached recommendations have been addressed, please feel free to contact us at 754-321-4200.

DM:smn Enc.

cc: Shelley Meloni, Director, Pre-Construction

Mark Dorsett, Manager, Zone 1, Physical Plant Operations Division

Broward Teachers Union

Federation of Public Employees

Gerald Devio, Supervisor II Custodial

Benjamin Osborne, Supervisor II Custodial

Mark Murray, Supervisor II Custodial

Sam Bays, Director, Maintenance Operations

Kurt Wirz, Area Manager Trades

# **IAQ Assessment**

Coconut Creek	Elementary Evaluation Dat	May 10, 2017	Time of Day 8:4	5 am
Outdoor Conditions Tempera	ature 80.2 Relative	Humidity 61.2	Ambient CO2 49	7
		Range CO <sup>2</sup> % - 60%	Range # Oc MAX 700 > Ambient	cupants 2
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in	Yes	No	10 Ceiling tiles	
Walls Drywall/Tackboard	No	No		
Floor Carpet	Yes	No		
Ceiling Clean Yes Walls Clean Yes	HVAC Supply Grills Clean	No	HVAC Return Grills Clean	No
Walls Clean Yes  Flooring Clean No	Inside of Supply Duct Clean	N/A	Inside of Return Duct Clean	No
Room Surfaces No Clean	Ceiling at Supply Grills Clean	Yes		
Trash Removed No Signs of Pests No	Exhaust Fans Working Drain Traps Wet	Yes	Unapproved Chemicals / Cleaners in Room	No
Room Cluttered Yes	Food if Stored in Room is in Sealed Containers	N/A	Air Fresheners in Room	No
Mechanical Equipment Location	Roof Top		Mechanical Room Clean	N/A
Filters Installed Properly N/A	Filters Clean	N/A	Inside of HVAC Unit Clean	N/A
Condensate Pan Clean N/A	Cooling Coil Clean	N/A		
Fresh Air Intake Location	Roof top	▼	Fresh Air Intake Free	N/A
Pollutant Sources Near Air Intake	Not readily accessible	▼	of Obstruction	
Observations				
IAQ PROTOCOL NOT COMPLET Media Center. Multiple stained of in some cases right next to supp (cabinets/display cases) have du	ceiling tiles and dusty ceiling ti bly registers. Shelves clean, bu	ut books have layer of	dust on top. Elevated sur	faces

rectangle. Rectangle rug is stained and needs cleaning.

# **Corrective Actions to be Completed by Site Based Staff**

Thoroughly clean elevated/horizontal surfaces	▼
Remove stuffed animals from room which	▼
can be source of dust allergens	▼
Shampoo the stains in carpet, and ventilate	▼
Clean HVAC Return/Supply Grill with Wexcide	▼
Clean dust from ceiling tiles or replace	▼
Remove and replace A/C Filters	▼
	▼

# **Corrective Actions to be Completed by PPO**

Our course Actions to be completed by 11 C	
Remove and replace stained ceiling tiles	▼
Evaluate and repair cause of stained ceiling tile	▼
Install new ceiling tile upon repair, cuts needed	▼
	▼
	▼
	▼
	▼
	▼

#### **Observations**

Teacher reports being sick for many months. Currently noticeably stuffy / nasal sounding. Strong VOC / paint odor in room and just outside adjacent hallway. Paint project was started 1 day prior and still out to dry. Bathroom vent is dirty/dusty. Area rug from FISH 130 observed in the main hallway, removed from room recently. Needs to be discarded. Teacher reports that when she brought kids to Science Rm (FISH 143) the science teacher had an allergic reaction and claimed it was from the kids. Multiple stained ceiling tiles, dusty supply registers, and adjacent tiles in adjacent hallway (008).

#### Corrective Actions to be Completed by Site Based Staff

Controlled to be completed by the Eucou C	
Thoroughly clean elevated/horizontal surfaces	▼
Encourage occupant to reduce clutter	▼
Room too cluttered to clean properly	▼
Store items in plastic containers with lids	▼
Discard Area Rug	▼
	T▼
	▼
	▼

#### Corrective Actions to be Completed by PPO

▼
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▼
▼
▼
▼
▼
▼

**Evaluation Date** 

Coconut Creek Elementary

May 10, 2017

Time of Day

8:30 AM

Outdoor Conditions Temperatu	re 80.2 Relative	e Humidity 61.2	Ambient CO2 4	97
Fish         Temperature         Range           132         71.6         72 - 73	, <u> </u>	Range CO % - 60%		10
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in	Yes	Yes	5 tiles	
Walls Tack Board	No	No		
Floor 12" x 12" Vinyl	No	No		
Ceiling Clean Yes	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean	Yes
Walls Clean Yes Flooring Clean Yes	Inside of Supply Duct Clean	N/A	Inside of Return Duct Clean	No
Room Surfaces No Clean	Ceiling at Supply Grills Clean	Yes		
Trash Removed Yes	Exhaust Fans Working	Yes	Unapproved Chemicals / Cleaners in Room	No
Signs of Pests No	Drain Traps Wet	Yes	Air Fresheners	No
Room Cluttered Yes	Food if Stored in Room is in Sealed Containers	N/A	in Room	140
Mechanical Equipment Location	HVAC system is recessed in	drop ceilng	Mechanical Room Clean	N/A
Filters Installed Properly Yes	Filters Clean	No	Inside of HVAC Unit Clean	No
Condensate Pan Clean Yes	Cooling Coil Clean	Yes		
Fresh Air Intake Location	Oucted to roof-top	▼	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	lo	▼	or obstruction	
Observations				

5 water stained ceiling tile. 2 tiles near A/C unit appear to be insulation issue. 3 ceiling tiles appear to be roof issues. The inside of the A/C unit is dirty. Filter needs to be changed. Reduce items in classroom so the room surfaces can be cleaned properly. Reduce cardboard boxes.

# Corrective Actions to be Completed by Site Based Staff

Replace ceiling tiles after repairs	▼
Thoroughly Clean Classroom	▼
Reduce classroom items	▼
Reduce cardboard boxes	▼
Replace A/C filter	▼
Store items in plastic containers with lids	▼
	▼
	▼

#### Corrective Actions to be Completed by PPO

Onrective Actions to be completed by 11 C	
Repair Cause of Stained Ceiling Tiles - Roof	▶
Repair Cause of Stained Ceiling Tiles- Insulation	▶
Clean the HVAC coil and inside of the unit	▶
	▶
	▶
	▶
	•
	▼

Replace ceiling tiles after repairs	▼
Replace A/C filter	▼
	▼
	▼
	▼
	▼
	▼
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# **IAQ Assessment**

Coconut Creek Elementary Eval	uation D	ate May 10, 2017	Time of Day 8:45	am
Outdoor Conditions Temperature 80.2	Relati	ve Humidity 61.2	Ambient CO2 497	7
Fish         Temperature         Range         Relative Hum           143         73.4         72 - 78         69.5	<del></del> i	Range <u>CC</u> 0% - 60% 57		o 0
Noticeable Odor No Visible water da staining?		Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in Yes		No	6 Ceiling tiles near & arour	nd AC
Walls Drywall/Tackboard No		No		$\neg \neg 1$
F1 42" \(\dagger\) (10" \(\dagger\)				
No No		No		
Ceiling Clean  Yes  HVAC Su  Grills Cle  Walls Clean  Yes		Yes	HVAC Return Grills Clean	Yes
Flooring Clean Yes Inside of Duct Clear		Yes	Inside of Return Duct Clean	Yes
Room Surfaces Yes Ceiling at Grills Cle		Yes		
Trash Removed Yes Exhaust Fans	Working	N/A	Unapproved Chemicals / Cleaners in Room	No
Signs of Pests No Drain Tr	raps Wet	Yes	Cleaners III Nooni	
Room Cluttered Yes Food if Stored in in Sealed Contain		N/A	Air Fresheners in Room	No
Mechanical Equipment Location Above Ceiling			Mechanical Room Clean	N/A
Filters Installed Properly Yes Filter	s Clean	No	Inside of HVAC Unit Clean	No
Condensate Pan Clean N/A Cooling Co	il Clean	N/A		
Fresh Air Intake Location Roof top		▼	Fresh Air Intake Free of Obstruction	N/A
Pollutant Sources Near Air Intake Not readily accessib	le	▼		
Observations				
IAQ PROTOCOL NOT COMPLETED PRIOR TO ARRIVA	<u>ـــــــ</u>			
Science Room, vacant at inspection. Lots of cardboa		es, stuffed animals and	d other items stored in room.	
Stained rug rolled up inside room.				
Corrective Actions to be Completed by Site Based Sta	aff	Corrective Acti	ions to be Completed by PPC	)
Thoroughly clean elevated/horizontal surfaces	▼	Remove and re	eplace stained ceiling tiles	▼
Encourage occupant to reduce clutter	▼	<del></del>	ir cause of stained ceiling tile	-
Room too cluttered to clean properly	<b>▼</b>		tile upon repair, cuts needed	
Discard Area Rug	▼	Clean I	HVAC coil and pan	▼

**▼** 

**Repair HVAC to Reduce Humidity Levels** 

Remove cardboard boxes

Store items in plastic containers with lids Remove and replace A/C Filters